REMARKS/ARGUMENTS

Status of Claims

Claims 1-31 are pending in the application.

Claims 19-31 were previously withdrawn from consideration.

Claims 1 and 6 are hereby amended.

Claims 2, 5, 17, and 19-31 are hereby canceled.

Claims 32-36 are new.

Applicants hereby request further examination and reconsideration of the presently claimed application.

Election/Restriction

The Examiner restricted the claims into the following groups:

I. Claims 1-18 drawn to a process for cementing a subterranean formation, classified in class 166, subclass 293; and

II. Claims 19-31 drawn to a cement composition used in subterranean formations, classified in class 106, subclass 823.

On July 28, 2005, Craig Roddy made a provisional election of Group I without traverse. The Applicants hereby affirm the election.

Claim Rejections – 35 USC § 102

The Examiner rejected claims 1-6, 17, and 18 under 35 USC § 102(b) as being anticipated by *Villar* (U.S. 6,060,535). As explained by the Court of Appeals for the Federal Circuit: "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegall Bros. v.*

Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

Amended claim 1 reads:

> 1. A process for cementing a subterranean formation, comprising:
> (a) forming a cement composition comprising a cement and one or more beads combined with the cement; and
> (b) introducing an inert gas phase to the cement composition **via in situ formation of the inert gas while the cement composition is positioned in the well bore**.

Villar does not anticipate amended claim 1 because *Villar* fails to teach each and every claim limitation. More specifically, *Villar* fails to teach the in situ formation of the inert gas while the cement composition is positioned in the well bore. By contrast, *Villar* teaches that the gas is injected into the cement slurry at the surface, i.e. prior to positioning the cement slurry in the well bore. *See Villar*, col. 10, lines 57-67. Injecting the gas into the cement slurry at the surface is not the same as forming the gas in situ while the cement composition is positioned in the well bore. Thus, *Villar* fails to teach each and every limitation of claim 1, and consequently, cannot anticipate claim 1. Claims 3, 4, 6-16, and 18 are allowable because they depend on an allowable independent claim 1.

Claim Rejections – 35 USC § 103

The Examiner rejected claims 7-12 under 35 USC § 103(a) as being unpatentable over *Villar* in view of *Burkhalter* (U.S. 4,450,010). The Examiner rejected claims 14-16 under 35 USC § 103(a) as being unpatentable over *Villar* in view of *Heathman* (U.S. 5,996,693). The Examiner rejected claim 13 under 35 USC § 103(a) as being unpatentable over *Villar* and *Burkhalter* further in view of *Dillenbeck* (U.S. 5,613,558). Thus, claims 7-12 stand or fall on the application of *Villar* to the claims. The requirements for establishing a *prima facie* case of obviousness are well established:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on Applicants' disclosure. MPEP § 2142 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

As explained in reference to the § 102(b) rejections above, *Villar* fails to teach or suggest the limitations contained in amended claim 1. In addition, all dependent claims incorporate the limitations of the claims they depend on. Because claims 7-12 depend on and therefore incorporate the limitations of claim 1 and *Villar* fails to teach the limitations of claim 1, *Villar* also fails to teach or suggest the limitations contained in claims 7-12. The Examiner does not cite the remaining prior art references to teach the limitations that are absent from *Villar*. Thus, the Examiner has not established a *prima facie* case of obviousness as to claims 7-16, which are allowable over the cited prior art.

New Claims

New claims 32-36 have been added to further define the invention. More particularly, the new claims focus on the addition of an inert gas to the cement composition to compensate for the destruction of the beads caused by the down hole pressure. New claims 32-36 are novel and non-obvious over the cited prior art because they recite the limitation that the inert gas compensates for the estimated change in the actual density such that the actual density is about equal to the desired density when the cement composition is positioned down hole, which is not taught by the cited prior art. No new matter is contained in these new claims.

CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by Applicant. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Office Action dated August 4, 2005 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,

CONLEY ROSE, P.C.

Date: 11/2/05

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